Operating Instructions

STEREO DOUBLE CASSETTE TAPE DECK AMPLIFIER
DC-Z82

FM/AM DIGITAL SYNTHESIZER TUNER
F-Z92/F-Z92L

STEREO TURNTABLE
PL-Z82/PL-Z92

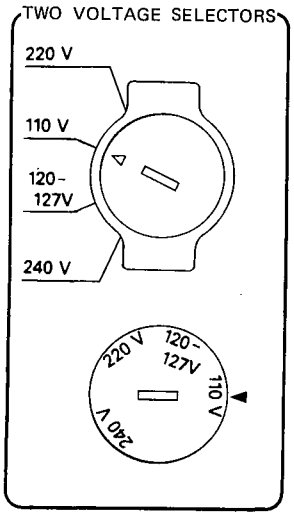
Thank you for buying this PIONEER product.
Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

"This product is manufactured to comply with the radio interference requirements of EEC Directive 76/889/EEC and 82/499/EEC."

LINE VOLTAGE SELECTOR SWITCHES

Only multi-voltage models are provided with these switches. U.S., Canadian, European, U.K., and Australian models are not provided with these switches.
Mains voltages in Saudi Arabia are 127 V and 220 V only. Never use this model with 110 V setting in Saudi Arabia.
Before your model is shipped from the factory, the switches are set to the power requirements of the destination; nevertheless, you should check that they are set properly before plugging the power cord into the AC outlet.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selectors and adjust so that the tip of the arrow points to the voltage value of your area.



IMPORTANT 1

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT 2

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last, make sure that the power switch is off.

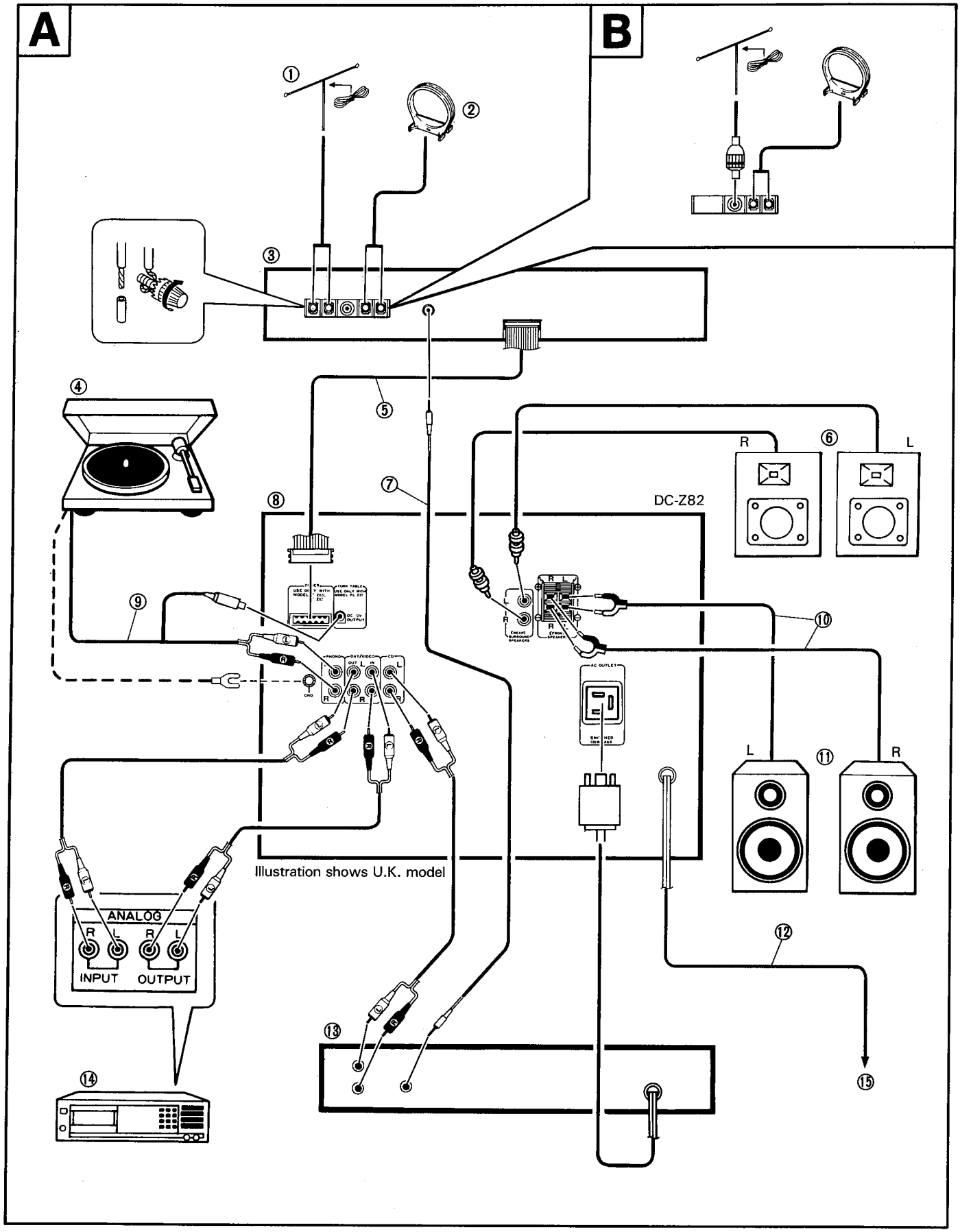
FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code:

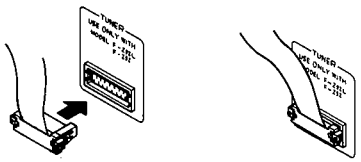
Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
Equipment sold in the U.K. is not supplied with a power plug.

PIONEER®
The future of sound and vision.


A
B
①
②
③
④
⑤
⑥
R
L
⑦
DC-Z82
⑧
⑨
⑩
⑪
R
L
⑫
⑬
⑭
⑮
ANALOG
R L R L
INPUT OUTPUT
Illustration shows U.K. model

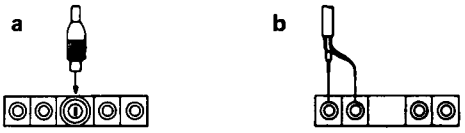
C



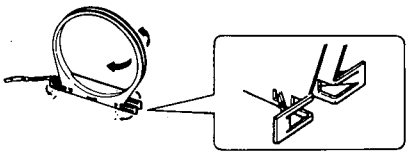
D

Wrong
Wrong

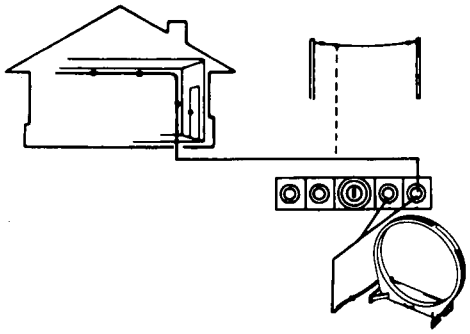
E


a
b

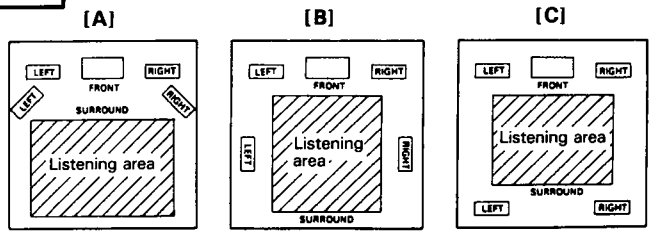
F



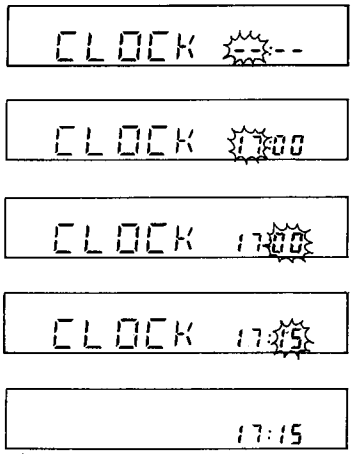
G



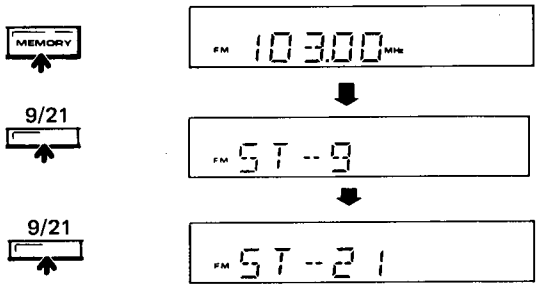
H


[A]
[B]
[C]
LEFT
RIGHT
FRONT
SURROUND
Listening area

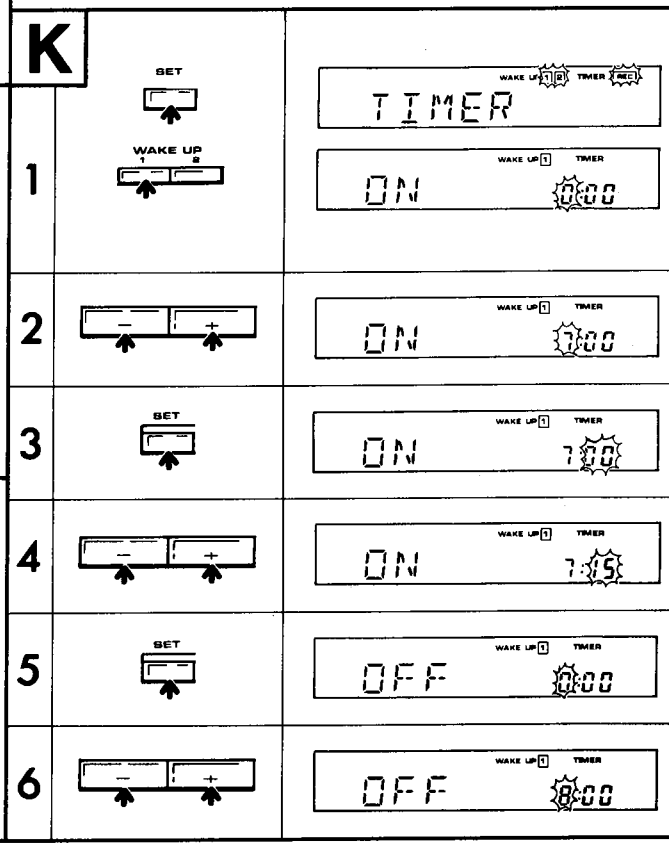
I


CLOCK
CLOCK
CLOCK
CLOCK
17:15

J


MEMORY
9/21
9/21
FM 103.00 MHz
FM ST-9
FM ST-21

K


SET
WAKE UP
1
2
3
4
5
6
TIMER
ON
ON
ON
OFF
OFF

7 SET — OFF 8:00

8 – / + — OFF 8:15

9 SET — FUNC → CD

10 – / + — CD

TUNER — SET — – / + — ST -- 1 — – / +

11 SET — VOL --8

12 – / + — VOL --8

13 SET

14 WAKE UP 1 2 — FM 103.00MHz 17:25

15 POWER STANDBY/ON — 17:25

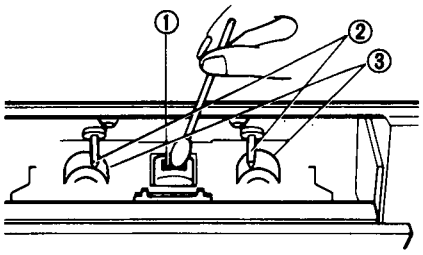
L

4 SET — TIMER → ON 0:00

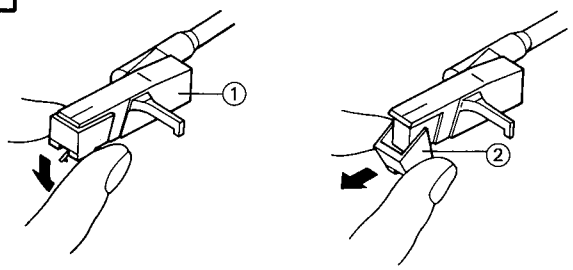
14 REC — FM 103.00MHz 17:25

15 POWER STANDBY/ON — 17:25

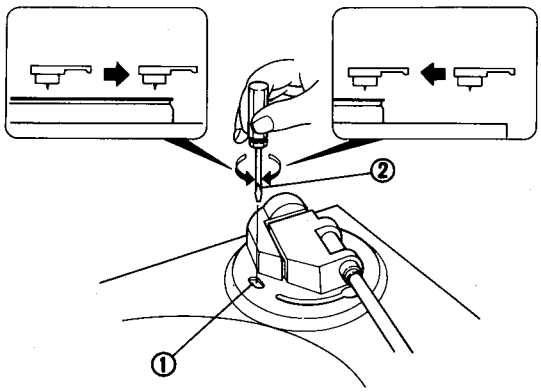
M



N



O



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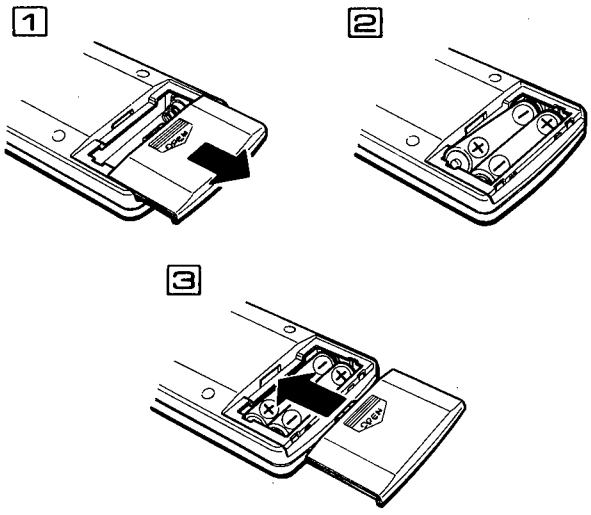
PUTTING BATTERIES INTO REMOTE CONTROL UNIT

1. Open the rear cover.
2. Install size "AAA" (IEC R03/UM-4) batteries, making sure that the ⊕ ⊖ polarity is correct.
3. Close the cover.



Cautions for handling batteries.

Misusing batteries can result in electrolyte leakage or explosions. Bear in mind the following points for getting the most out of your batteries.

- When loading the batteries into the battery compartment, make sure the plus ⊕ and minus ⊖ polarities correspond to the markings on the compartment.
- Even though they may be the same shape, batteries come with different voltage ratings. Do not mix or use different types of batteries together. Use only the same kind of batteries.
- Do not mix up new batteries and used batteries but replace all the batteries at the same time.
- Do not heat up, disassemble or shortcircuit batteries or throw them into a fire.

SET-UP FOR OPTIONAL PL-Z82/PL-Z92 TURNTABLE

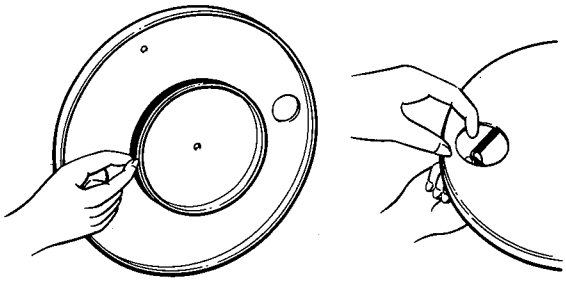
1. Check the parts.

EP adaptor (You will find this taped on the cabinet)

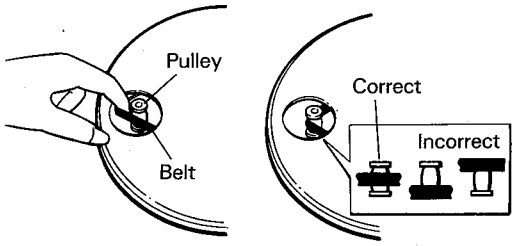
Platter mat

Platter

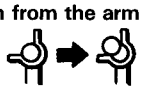
2. Pinch the belt on inner rim between thumb and forefinger.



3. Slip the belt over finger and pull out, inserting finger in hole.
4. Insert finger from top of the platter and transfer the belt to forefinger.
5. Lower the platter onto the spindle.
6. Release belt onto pulley.



7. Place the platter mat on the platter(with "PIONEER" side up).
8. Remove the vinyl band holding the tonearm.
9. Remove the tonearm from the arm rest.



10. Remove the stylus cover.

CONNECTIONS

Refer to page 2 for the connections diagram.

① Accessory FM antenna
② Accessory AM loop antenna
③ FM/AM tuner (F-Z92 or F-Z92L)
④ Turntable (Separately sold PL-Z82 or PL-Z92)
⑤ Tuner input/output cord
⑥ Surround speaker system
⑦ CD player control cord
⑧ Cassette tape deck amplifier
⑨ Turntable output cord
⑩ Speakers cord
⑪ Speaker system
⑫ Power cord
⑬ CD player (Separately sold PD-Z72T or PD-Z82M)
⑭ Digital audio tape deck (DAT) or video cassette recorder (VCR)
⑮ AC wall socket

Plug the power cord into the AC wall socket outlet only after all the connections have been completed.

If the FM antenna of the FM/AM tuner terminal is a PAL connector only, then refer to connection diagram B.

Proceed as follows with the set-up and connections:

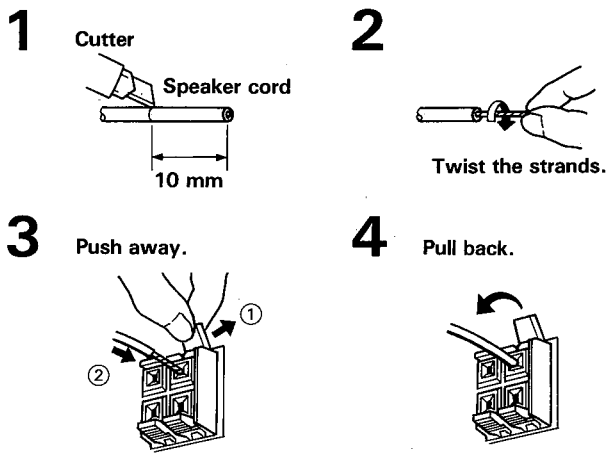
1. **Place the cassette tape deck amplifier on top of the CD player.**
2. **Connect the CD player OUPUT jacks to the cassette tape deck amplifier CD INPUT jacks with audio cords.**
3. **Place the tuner on top of the cassette tape deck amplifier.**
4. **Connect the tuner input/output cord ⑤ to the cassette tape deck amplifier.**
   TUNER CONNECTION (Page 3, diagram C)
   Insert the connector until it locks, thus ensuring that it is connected. When disconnecting the connector, pull it in the opposite direction while pressing the left and right claws.
   If using this unit together with the optional PD-Z72T or PD-Z82M, connect the control cord ⑦.
5. **Connect the FM antenna ① and the AM loop antenna ② to the tuner antenna terminals.**
6. **Place the turntable on top of the tuner.**
7. **Connect the turntable cords ⑨ to the cassette tape deck amplifier jacks.**
   If using this unit together with the optional PL-Z82 or PL-Z92, connect the turntable's audio cords and power supply cord respectively to the cassette tape deck amplifier's PHONO jacks and DC 12V OUTPUT jack.
   If using a different turntable, connect the audio cord and earth cord.
8. **Use the "DAT/VIDEO" jacks for connection to the audio input/output jacks of a DAT or VCR.**
   If connecting an LD player, connect the LD player audio output jacks to the "DAT/VIDEO" input jacks.

NOTE:

- *Insert the plugs securely into the jacks. Improper connection can lead to sound distortion or malfunctioning.*
- *The white plug is for the left channel connection and the red plug for the right channel connection.*

9. **Connect the speaker cords ⑩ to the SPEAKERS terminals.**
   Connect the "+" terminals on the cassette tape deck amplifier to the "+" terminals on the speakers, the "−" terminals on the cassette tape deck amplifier to the "−" terminals on the speakers.

Connecting the speaker cords.

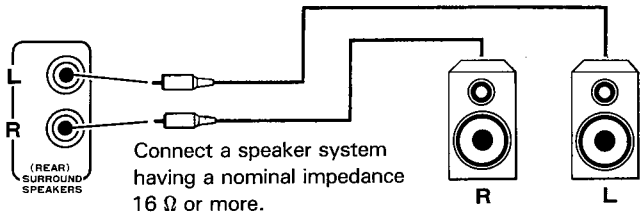


NOTE:
Do not allow the conductors of the cords to project beyond the terminals and to come into contact with other conductors. A breakdown or failure may occur when conductors touch one another.

Speaker impedance
Connect speaker systems with a nominal impedance ranging from 6 to 16 Ω.

Surround speaker connection

Connect the plugs properly.



10. **Finally, connect the power cord ⑫ to the AC wall socket ⑮.**

ANTENNA CONNECTIONS

Radio reception is not possible unless the antenna is properly connected.

The strength of broadcast signals varies from one area to another. Signal propagation is especially poor in metropolitan areas, where there are many tall buildings, and in mountainous areas. Proper antenna installation is vital to good reception.

FM ANTENNA

FM Antenna Attachment (Page 3, diagram D)

Connect the accessory FM antenna to the FM terminals. Stretch the antenna out to its full length, and affix it to a wall, etc.

External FM antenna installation (Page 3, diagram E)

Use an external antenna when the signals from the station are weak and cannot be picked up by the accessory FM antenna, or when the sound heard is accompanied by large amounts of noise.

If the FM antenna terminal is a PAL terminal, then connect as shown in figure E-a.

If the FM antenna terminal is not a PAL terminal, then connect as in figure E-b if using a 75-ohm coaxial cable.

AM ANTENNA

The AM loop antenna supplied with the tuner should be connected to the AM antenna terminals. The antenna should be placed at a distance from the tuner, and should not be allowed to touch metallic objects. Avoid placing it near CD players, personal computers, television sets, and other devices generating radio frequencies.

Setting Up the AM Antenna (Page 3, diagram F)

- Fold out the supports on the bottom of the antenna. Insert the stopper in the hole in the antenna to lock them in place.
- Place the antenna on a level surface and rotate it to locate the orientation that yields the best reception.

External AM antenna (Page 3, diagram G)

Indoor AM antenna

Provide a vinyl-coated wire (5 to 6 meters long). Secure one end to the AM terminal and the other end to a wall or other high location.

Outdoor AM antenna

If reception is still poor even when a lead antenna has been stretched out indoors, stretch out a vinyl-coated wire and secure it outdoors.

NOTE:

Do not detach the AM loop antenna when using the external AM antenna.

FM/AM CHANNEL STEP SWITCH

This switch is not provided on models for Europe or U.K..

The adjustment is only necessary when there is a CHANNEL STEP switch on the rear panel.

The CHANNEL STEP switch is located on the rear panel of the digital synthesizer tuner. Before the tuner leaves the factory, this switch is set to the channel allocation system of the area in which the tuner is sold. When the TUNING switch is pressed, the frequency display will change in the following way.

[100kHz/10kHz] position:

Set to this position for areas with FM reception step of 100kHz and AM 10kHz.

[50kHz/9kHz] position:

Set to this position for areas with FM reception step of 50kHz and AM 9kHz.

NOTE:

- *If the switch is set to the wrong position, correct tuning will not be possible.*

Consult your dealer if you are not sure about the channel allocation system in your area.

SURROUND SYSTEM

What is surround sound?

With ordinary stereo, sound normally comes only from speakers in front of the listener. In a concert hall or theater, though, sound reflected from the walls and ceiling reaches the listener from all directions. This is what accounts for the feeling of ambience or spaciousness of a live performance.

Surround sound works to reproduce these effects to produce fuller, more "live" sound.

STEREO WIDE

When the surround speakers are not connected, the stereo wide function will be activated. This function enhances the stereo effect.

Note that it does not operate in the case of a monaural source, however.

Speaker System Placement Examples (Page 3, diagram H)

The sound effects obtained in a surround system depend on speaker placement. Experiment with various arrangements to find the one most suited to your tastes.

Placing the speakers so that they are slightly higher than ear level contributes to sound quality.

[Case A]

Good sound dispersion; recommended for movies, etc.

[Case B]

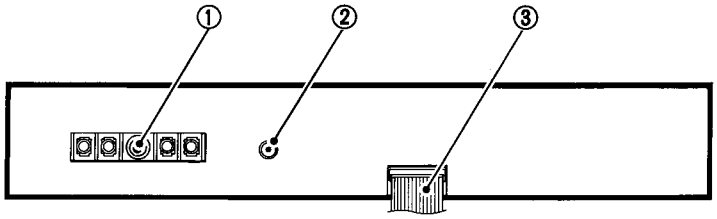
Sound appears to come from directly in front of listener. Good for listening to music recordings.

[Case C]

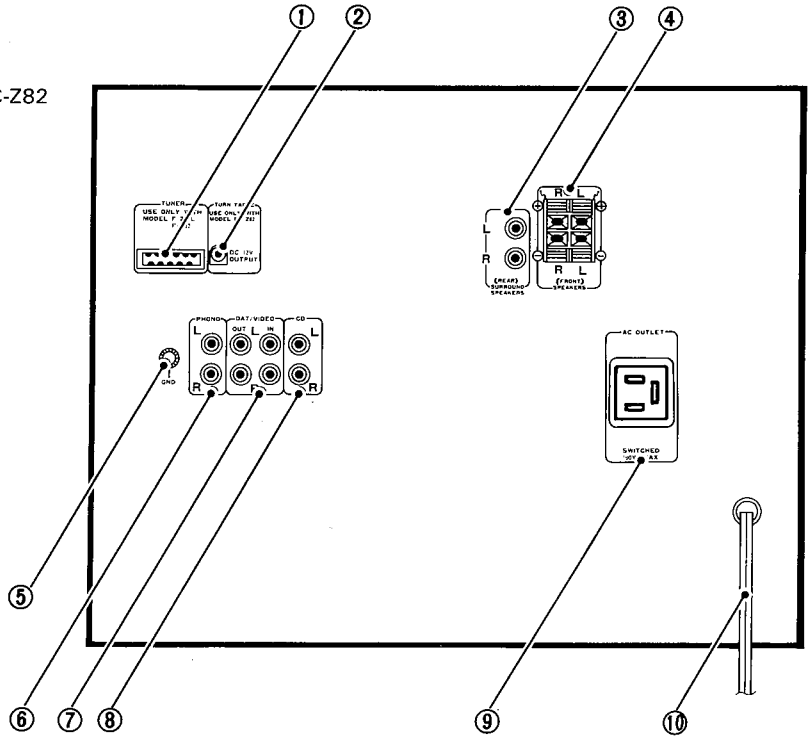
Offers most varied effects; good for watching sports programs or listening to live recordings.

PANEL FACILITIES

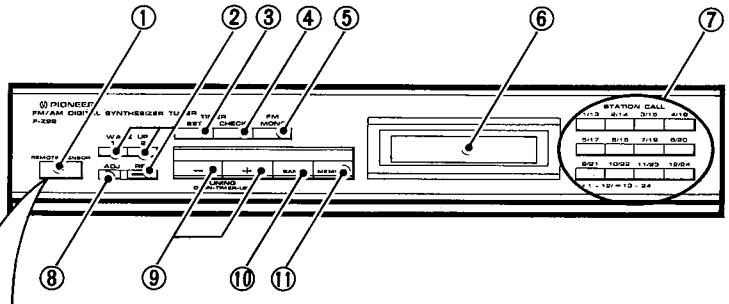
F-Z92/F-Z92L



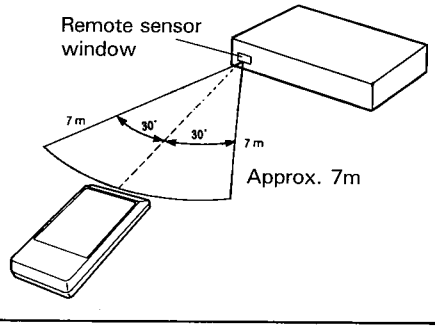
DC-Z82



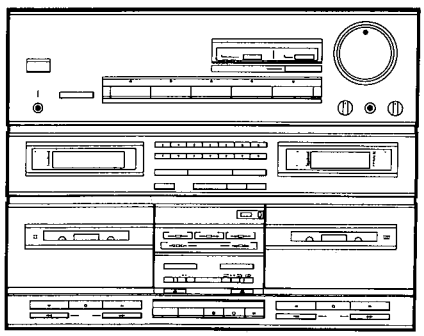
F-Z92/F-Z92L

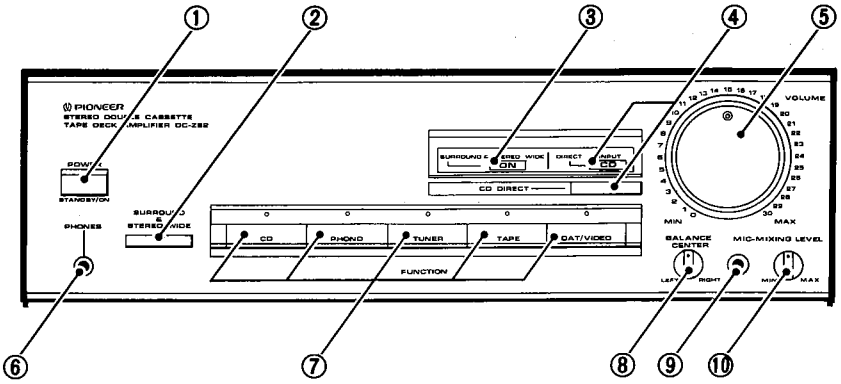


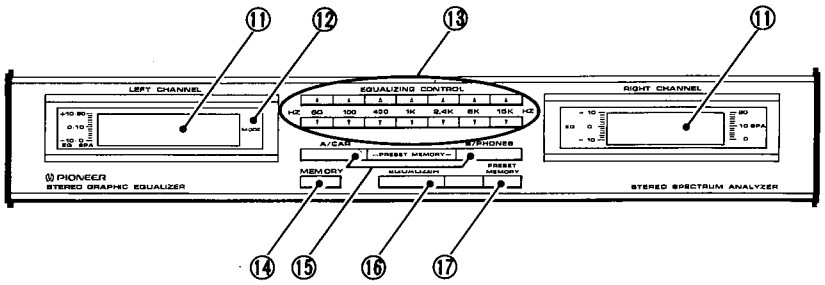
Range of remote control

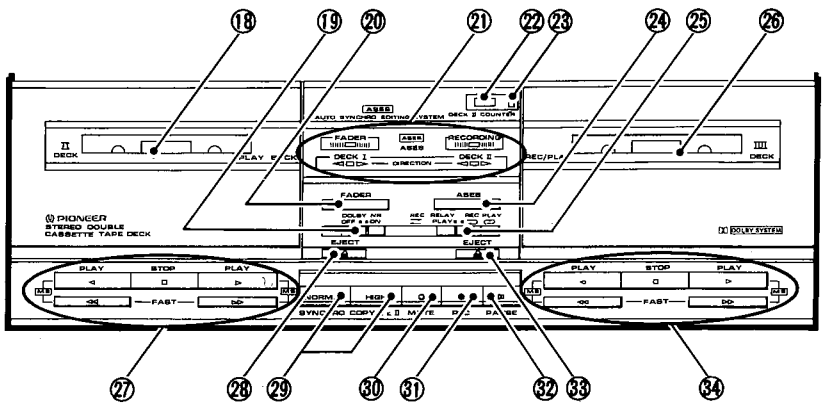


DC-Z82

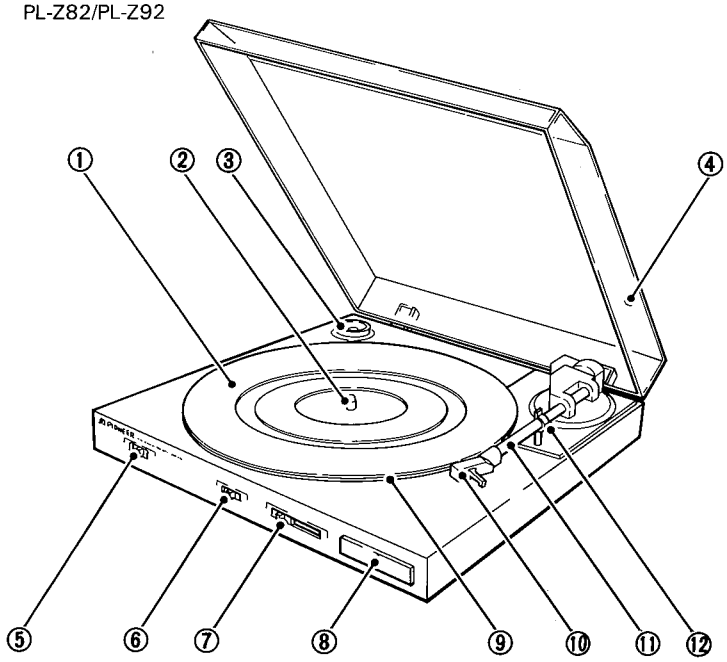


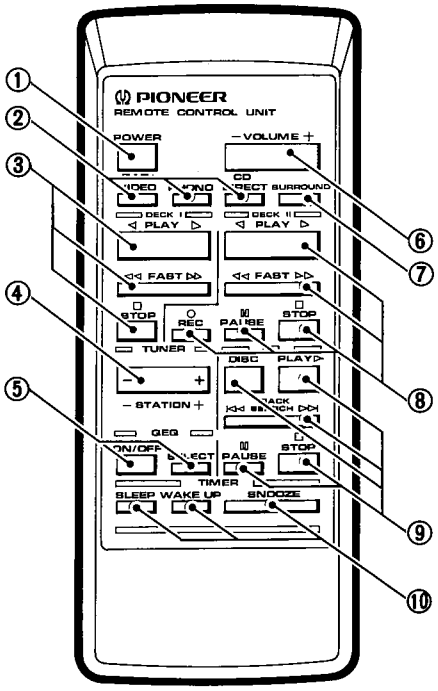






PL-Z82/PL-Z92





REAR PANEL FACILITIES

Tuner: F-Z92/F-Z92L

① FM/AM ANTENNA terminals
Antennas must be connected to these terminals; otherwise you will not be able to receive stations. See page 7 for details on ANTENNA CONNECTIONS.

② CONTROL OUT jack
Connect this jack to the CONTROL IN jack of a CD player (PD-Z72T or PD-Z82M).
- This jack enables the remote control unit provided with the cassette tape deck amplifier to control the CD player.
  Also, by connecting this to the CONTROL IN jack of the optional CD player PD-Z72T or PD-Z82M, it is possible to enjoy synchronized recording of compact discs on the cassette deck (Auto Synchro Editing System: ASES).

③ TUNER input/output cord
Connect to the TUNER jack of the cassette tape deck amplifier.

Cassette tape deck amplifier: DC-Z82

① TUNER jacks
Connect the F-Z92 (or F-Z92L) FM/AM tuner.

② TURNTABLE OUTPUT jack
This jack supplies power to the PL-Z82 or PL-Z92.

③ SURROUND SPEAKERS jacks
Connect the Surround speaker systems.

NOTE:
Connect a speaker system having a nominal impedance of 16 Ω or more.

④ SPEAKERS terminals
L: Connect the left speaker system as seen from the listening position.
R: Connect the right speaker system as seen from the listening position.

NOTE:
Connect a speaker system having a nominal impedance ranging from 6 Ω to 16 Ω.

⑤ Ground terminal (GND)
Connect this to the ground terminal on the turntable (except for PL-Z92 and PL-Z82).

⑥ PHONO input jacks
Connect the audio output cord on the turntable to these jacks.

⑦ DAT/VIDEO jacks
IN: Connect to audio output jacks of DAT, LD player or VCR, etc.
OUT: Connect to audio input jacks of DAT or VCR, etc.

⑧ CD input jacks
Connect to audio output jacks of CD player.

⑨ AC OUTLET (SWITCHED 100 W MAX)
Power supplied through these outlets is turned on and off by the cassette tape deck amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

NOTE:
Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET in order to avoid overheating or fire risk.
This can cause the cassette tape deck amplifier to malfunction.

⑩ Power cord
Connect this to the AC wall socket.

FRONT PANEL FACILITIES

Tuner: F-Z92/F-Z92L

① REMOTE SENSOR window

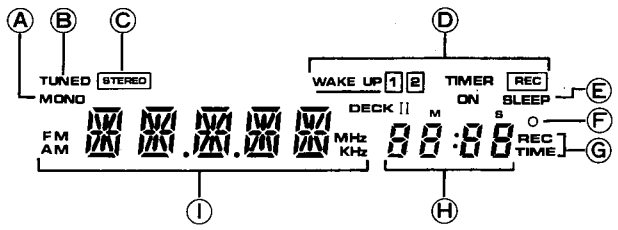
② Timer selector switches
[WAKE UP 1,2]
Use for timer playback setting.
[REC]
Use for timer recording setting.

③ SET switch
Use for current time, timer playback, and timer recording setting.

④ CHECK switch
After setting the unit for timer playback or timer recording, use this switch to confirm that the settings are as intended.

⑤ FM MONO switch
Turn on when there is much noise during reception of FM stereo broadcasts. The reproduced sound will become monaural but noise will be reduced.

⑥ Display section
Shows current time, received frequency, contents of timer settings, etc.



Ⓐ MONO indicator
Lights when the FM MONO switch is set to ON. When this indicator is lit, FM stereo broadcasts are reproduced monaurally.

Ⓑ TUNED indicator
Lights when a broadcast is received.

Ⓒ STEREO indicator
Lights when an FM stereo broadcast is received when the FM MONO switch is set to OFF.

Ⓓ Timer indicators
These show which timers have been set.

Ⓔ SLEEP indicator
Indicates that the sleep timer is operating.

Ⓕ Remote control indicator
Flashes when a command is received from the remote control unit.

Ⓖ Deck II REC TIME indicator
Lights when deck II is recording.

Ⓗ Time display
Usually this shows the present time. When recording on DECK II, it shows the elapsed time since recording began.

Ⓘ Frequency display
Shows received broadcast frequency. Also gives scrolling display of main function status.

⑦ STATION CALL switches
These are used to recall memorized stations and to memorize stations.

⑧ ADJ switch
Used for setting the current time.

⑨ –, + switches
[During tuning]
These are used to locate the stations.
The "–" switch to go to a lower, and the "+" switch to go to a higher frequency.
[During time and timer setting]
Used for decreasing "–" or increasing "+" the values when setting the time or timer.

⑩ BAND selector switch
[For model F-Z92]
Each time this switch is pressed, FM or AM reception is selected alternately.
FM and MHz light: FM reception
AM and kHz light: AM reception
[For model F-Z92L]
Each time this switch is pressed, FM, MW or LW reception is selected alternately.
FM and MHz light: FM reception
AM and kHz light: MW or LW reception

⑪ MEMORY switch
This switch is used to memorize stations. When the switch is pressed, the frequency display will flash. To memorize the frequency of any station, press the station call switch while the frequency display flashes.

Cassette tape deck amplifier: DC-Z82

- This unit has an automatic tape selector function.
- Tapes can be played back on deck I; tapes can be played back and recorded on deck II.
- Sound can be recorded as adjusted by the graphic equalizer.

Amplifier section

① POWER STANDBY/ON switch
When this switch is set to the on position, power is supplied to the cassette tape deck amplifier's main circuit. The POWER unit's switch is geared to selecting the transformer's secondary so that even in STANDBY position, the unit's circuitry will work as long as the power cord is connected to a power outlet. Disconnect the power cord from the power outlet when you do not plan to use the unit for a long period of time. The unit is in STANDBY when the tuner section display indicates only the time.

② SURROUND & STEREO WIDE switch
When surround speaker systems are connected to the SURROUND SPEAKERS jacks at the rear: By turning this switch ON, you can enjoy surround reproduction.
When surround speaker systems are not connected: By turning this switch ON, you can enjoy STEREO WIDE reproduction with greater left-right spread.

NOTE:
- *In the case of a monaural source, a SURROUND & STEREO WIDE effect cannot be obtained.*
- *SURROUND & STEREO WIDE function does not operate if CD DIRECT is on.*

③ SURROUND & STEREO WIDE indicator
Lights when the SURROUND & STEREO WIDE switch is on.

④ CD DIRECT switch/indicator
Press this switch to listen to a CD without passing the signal through sound quality adjustment circuits.

⑤ VOLUME control

⑥ Headphone jack (PHONES)
For stereo headphone plug.

⑦ FUNCTION switches/indicators
[CD]
Press to listen to a CD player connected to the CD jacks.
[PHONO]
Press to play records on a turntable connected to the PHONO jacks.
[TUNER]
Press to listen to a radio broadcast.
[TAPE]
Press to listen to a cassette tape.
[DAT/VIDEO]
Press to listen to a stereo component connected to the DAT/VIDEO jacks.

⑧ BALANCE control
Usually set this control to the central position. If turned counterclockwise, the volume of the right channel will decrease.
If turned clockwise, the volume of the left channel will decrease.

⑨ Microphone (MIC) jack
This is a standard jack for connecting a microphone.

⑩ MIXING LEVEL control
Use to adjust volume of microphone and playback sound.

Graphic Equalizer section

⑪ Graphic equalizer/Spectrum analyzer display
Ordinarily this shows the spectrum analyzer display. It shows a graphic equalizer display during operation of the EQUALIZING CONTROL switches.

⑫ MODE display

Ⓐ EQ ON indicator
Lights when the EQUALIZER switch is set to ON. When this indicator is lit, the graphic equalizer can be used to adjust sound quality.

Ⓑ MEMORY indicator
When the line is lit under "MEMORY," it indicates that the equalization curves memorized in the A/CAR and B/PHONES switches can be recalled.

Ⓒ A, B indicators
Indicates which equalization curve is currently recalled.
A: Curve stored in A/CAR. (Preset CAR or Memory A)
B: Curve stored in B/PHONES. (Preset PHONES or Memory B)

Ⓓ PRESET indicator
When the line is lit under "PRESET," it indicates that the equalization curves preset in the A/CAR and B/PHONES switches can be recalled.

⑬ EQUALIZING CONTROL switches
These strengthen or weaken the indicated frequency band. Press the upper switch to emphasize; press the lower switch to attenuate.

⑭ MEMORY switch
Use to store equalization curves in the memory recall switches (A/CAR or B/PHONES).

⑮ Memory recall switches
Use to recall equalization curves.

⑯ EQUALIZER switch
Turns the equalizer on and off. The EQ ON indicator lights when this switch is on.

⑰ PRESET/MEMORY switch
Determines whether the equalizer curves recalled by the Memory recall switches will be your own programmed memorized curves or the factory preset curves.

◪ Cassette tape deck Section

⑱ Deck I cassette door

⑲ DOLBY* NR switch
Set this switch to the ON position to activate the DOLBY NR system.
- Tapes recorded using Dolby noise reduction should always be played back with the noise reduction system on. Sound quality will be adversely affected if they are played back with the system off, or if tapes recorded using a different noise reduction system are played back with the Dolby NR system on.
- It is recommended that tapes recorded using Dolby B NR be so marked on the label. This will help to prevent incorrect setting of the noise reduction switch during playback.

*
Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

⑳ FADER switch
This switch is used to gradually fade out a recorded loaded tape in deck II. (The sound will be completely cut off after approximately 10 seconds and the tape will stop.)

㉑ Operation indicators
FADER: Lights when the FADER switch is on.
ASES: Lights when the ASES (Auto Synchro Editing System) is operating.
RECORDING: Lights when recording. Flashes when copying a tape.
Slow flashing — Normal copy
Rapid flashing — High speed copy
Direction (◄, ►): Indicates direction of tape travel during recording or playback. Flashes slowly in pause mode. Flashes rapidly during Music Search (MS).

㉒ DECK II COUNTER

㉓ Counter reset switch
Press this switch to reset the Deck II tape counter display to 000.

㉔ ASES switch
Use to automatically record a CD on cassette tape.
The sound will fade out at the end of the tape.

㉕ REVERSE MODE switch

Switch position	During playback	During recording
REC RELAY / PLAY	Plays both tape sides. When one deck finishes playback, the other side begins playback of both tape sides (6 times maximum). If there is a tape in only one deck, then that deck continuously plays both sides of the tape (6 times maximum).	Records on one side (Deck II only).
REC / PLAY	Plays both sides continuously (6 times maximum).	Records on both sides (Deck II only).

㉖ Deck II Cassette door

㉗ Deck I Operation switches
► PLAY (FWD) ..... For playing back a tape in the forward mode.
◄ PLAY (REV) ..... For playing back a tape in the reverse mode.
■ STOP..... For stopping the tape.
►► FAST..... Fast forward in forward mode, rewind in reverse mode.
Music search (MS) starts if this is pressed during playback.
◄◄ FAST..... Rewind in forward mode, fast forward in reverse mode.
Music search (MS) starts if this is pressed during playback.

㉘ Deck I EJECT switch

㉙ SYNCHRO COPY switches
Use for tape copying.
NORM: Copying from the Deck I tape to the Deck II tape at normal recording/playback speed.
HIGH: Copying at about twice normal tape speed. (Copies can be made in about half the NORM time.)

㉚ MUTE (O) switch (Deck II)
Use to create an unrecorded blank space between songs. The unrecorded space will be created for as long as this switch is kept depressed.

㉛ REC (●) switch (Deck II)
Set to recording standby mode. Recording will then begin when you press the PLAY switch (◄ or ►).

㉜ PAUSE (II) switch (Deck II)
Temporarily stops tape travel. Cancels pause mode when pressed again.

㉝ Deck II EJECT switch

㉞ Deck II Operation switches
► **PLAY (FWD)** ..... For playing back a tape in the forward mode.
◄ **PLAY (REV)** ..... For playing back a tape in the reverse mode.
■ **STOP** ..... For stopping the tape.
►► **FAST** ..... Fast forward in forward mode, rewind in reverse mode.
Music search (MS) starts if this is pressed during playback.
◄◄ **FAST** ..... Rewind in forward mode, fast forward in reverse mode.
Music search (MS) starts if this is pressed during playback.

Turntable: PL-Z92/PL-Z82

① Platter mat

② Platter spindle

③ EP adaptor
Place over the spindle to play 45-rpm singles.

④ Dust cover

⑤ SPEED switch
Set this switch in accordance with the speed of the record.
33: For 33-1/3-rpm records.
45: For 45-rpm records.

⑥ SIZE switch (only PL-Z92)
Set this switch in accordance with the size of the record.
30: For 30-cm records.
17: For 17-cm records.

⑦ ARM-ELEVATION switch
- Use for manual play.
- Use to suspend record play temporarily.
- Use when changing tracks during actual play.

[UP]: The tonearm rises. (The stylus moves away from the record.)
[DOWN]: The tonearm descends. (The stylus is lowered onto the record.)

⑧ PLAY/STOP switch (only PL-Z92)
Press this switch when starting auto play or when stopping play.

NOTE:
Be sure to press the switch firmly when starting playback: if not pressed firmly, the platter may rotate without the tonearm moving.

⑧ STOP switch (only PL-Z82)
Press this switch when stopping play.

⑨ Platter

⑩ Cartridge

⑪ Tonearm

⑫ Arm rest

NOTE:
PL-Z82 is not equipped with SIZE switch.

Remote control unit

① POWER key

② Function keys
DAT/VIDEO ..... Sets function to DAT/VIDEO.
PHONO ..... Sets function to PHONO.
CD DIRECT ..... Sets function to CD DIRECT.

③ DECK I operation keys
► ..... Forward play
◄ ..... Reverse play
■ ..... Stop
►► ..... Fast forward in forward mode, rewind in reverse mode. Music search (MS) starts if this is pressed during playback.
◄◄ ..... Rewind in forward mode, fast forward in reverse mode. Music search (MS) starts if this is pressed during playback.

④ TUNER STATION keys
- Before operation, memorize broadcast stations in the STATION CALL switches.

\+ ..... Stations change in order in the upward direction
– ..... Stations change in order in the downward direction.

⑤ Graphic equalizer (GEQ) operation keys
ON/OFF: Turns the equalizer on and off.
SELECT: Recalls the preset equalization curves (PRESET) and memorized equalization curves (MEMORY) in sequence.

⑥ VOLUME UP (+)/DOWN (–) keys

⑦ SURROUND key
Turns SURROUND & STEREO WIDE on and off.

⑧ DECK II operation keys
► ..... Forward play
◄ ..... Reverse play
►► ..... Fast forward in forward mode, rewind in reverse mode. Music search (MS) starts if this is pressed during playback.
◄◄ ..... Rewind in forward mode, fast forward in reverse mode. Music search (MS) starts if this is pressed during playback.
■ ..... Stop
II ..... Pause
● ..... REC (recording standby). Next, press the play key to begin recording.

⑨ CD operation keys

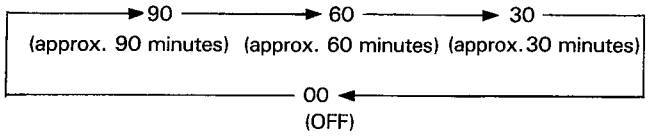
Make the connections so that the CD player can be operated by the remote control unit.

►..... Play
DISC..... DISC selection
■ ..... Stop
❚❚..... Pause
|◄◄, ►►|..... Track search

NOTE:
Note that the DISC selector key on the accessory remote control unit may not function, depending on the CD player used.

⑩ Timer operation keys

SLEEP: Sets the sleep timer. Each time you press this key, the setting changes as shown here. The current setting is shown on the tuner display.
Power turns off when your set time has elapsed.



If you press the SLEEP key during SLEEP operation, the display will show the time remaining till power turns off.

WAKE-UP: Timer playback setting/cancellation can be performed when the timer playback time has been set. This is shown in the tuner display section.

SNOOZE: Turns off power if pressed after timer playback begins. Timer playback begins again approx. 5 minutes later.

The amplifier section function automatically switches to the music source being operated when you press the CD playback (►), cassette tape deck playback (◄, ►), or tuner station controls.
To operate with the remote control unit, use the keys with the same function indicating symbols (for example ►) as those shown on the components.

NOTE:
It is not possible to operate the CD player with the remote control unless the remote control cord is connected (refer to page 2).

Range of remote control (See page 8)
When the remote control unit is pointed at the remote sensor window on the tuner and any of its keys is pressed, the tuner and other components can be operated by remote control.
Distance: Within a range of approx. 7 meters from the remote sensor window on the tuner.
Angle: Within approx. 30 degrees from the center of the remote sensor window on the tuner.
Remote control will not be possible if there is an obstacle between the remote control unit itself and the remote sensor window on the tuner.

HOW TO HANDLE CASSETTE TAPES

Bear in mind the following points before loading cassette tapes.

Is the tape loose, or is some of the tape outside the cassette?

If some of the tape is projecting outside the cassette shell or if it is loose, it may not feed between the capstan and pinch roller. This will prevent the tape from being transported or damage the tape itself. In cases like these, insert a pencil into the reel hole and take up the slack. (Fig. A) Some cassette tapes come with a plastic or thick paper stopper which prevents tape slack. Remove this stopper when loading the tape and replace it after using the cassette.

What are the accidental erasure prevention tabs for?

A cassette is provided with these tabs so that important recordings will not be erased accidentally. When the tab (Fig. B) on the cassette shell is broken out with the tip of a screwdriver, it will not be possible to activate the recording function even by pressing the recording (REC) switch, so valuable recordings will not be erased in error.
To re-record on a cassette whose tabs have been broken out, simply stick a piece of doubled adhesive tape over the tab areas, as shown in Fig. C.

NOTE:
The accidental erasure prevention tabs are located at the top left on both sides A and B (1 or 2), so that material on each side can be prevented from being erased in error.

Tips on using cassette tapes

- Leader tape (which does not allow sound to be recorded over it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for approx. 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack. Choose a location which is not exposed to the effects of magnetism, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are so thin, they easily jam in the pinch roller and capstan, and they are susceptible to other trouble such as irregular winding. Try not to use them with this unit.
  Use tapes of 90 minutes or less.

Fig.A

How to take up tape slack.

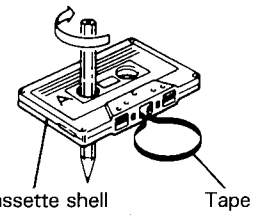


Fig.B

How to prevent already recorded tapes from being erased

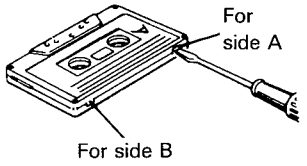
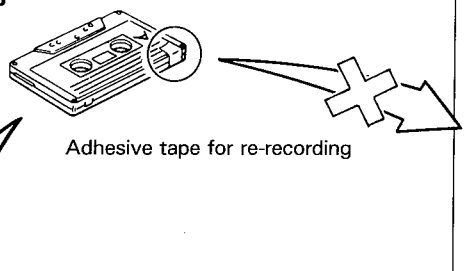


Fig. C

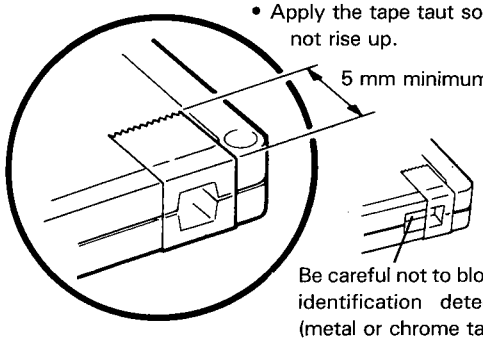
NOTE FOR RE-RECORDING ON A CASSETTE TAPE WHICH HAS A BROKEN TAB



Adhesive tape for re-recording

CORRECT METHOD OF APPLYING TAPE

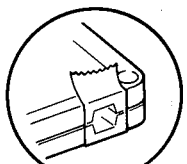
- Apply two layers of cellophane tape.
- Apply the tape taut so that it does not rise up.



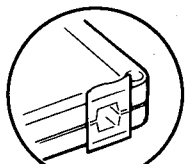
Be careful not to block the tape identification detection hole (metal or chrome tape).

INCORRECT METHOD OF APPLYING TAPE

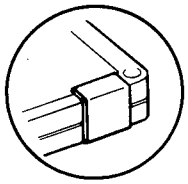
THIS MAY RESULT IN AN ACCIDENT



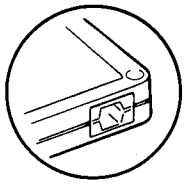
Curled tape



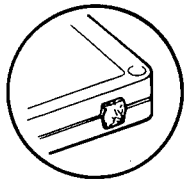
Protruding tape



Applying vinyl tape, gum tape, or tape other than cellophane tape.



Applying top portion only.



Insertion of an eraser or the like.

After removing the cellophane tape, completely wipe away all traces of paste. Use only alcohol.

BASIC OPERATIONS

Switch numbers used in the following explanation refer to the numbers appearing in the PANEL FACILITIES section on pages 8 and 9.

SETTING THE TIME (Tuner operation)

[Example] Setting the time to 17:15
(See page 3, diagram I.)

1. **Press the ADJ switch ⑧.**
2. **Use the "–" and "+" switches ⑨ to set the hours. ("17" is used in example.)**
3. **Press the SET switch ③.**
4. **Use the "–" and "+" switches ⑨ to set the minutes. ("15" is used in example.)**
5. **Press the SET switch ③ when "00" seconds of that minute are reached.**

- After plugging in this unit, be sure to set the present time. Timer playback and timer recording are not possible unless the time has been set.
- The time indication will appear as "--:--" if the AC power cord is unplugged. Be sure to set the time again after power has resumed.

PREPARATION

Press the POWER switch of the cassette tape deck amplifier for any of the following functions.

ABOUT THE FUNCTION SWITCHES

Select the FUNCTION switches before operating any of the equipment.

Auto Function

When DC-Z82, F-Z92 (or F-Z92L) and PD-Z72T (or PD-Z82M) are used together.

This model is equipped with "auto function" operation, so when the switches for playing CD, tape, or tuner are pressed, the amplifier function switches automatically.
Use the FUNCTION switches for PHONO and DAT/VIDEO source selection, since Auto Function is not effective for these.

NOTE:

- *There is no speaker output when headphones are plugged into the PHONES jack.*
- *When the CD DIRECT switch is on, you cannot use the graphic equalizer sound quality adjustment, microphone mixing, or SURROUND & STEREO WIDE functions.*
- *Function can not be switched during recording. (Auto function does not operate either.)*

LISTENING TO BROADCASTS (Tuner operation)

1. **Select the desired broadcasting band using the BAND selector switch ⑩.**
2. **Press the "+" or "–" TUNING switch ⑨ for higher or lower frequency.**

[Auto tuning]
Press the TUNING "–" or "+" switch until the frequency starts to change, then release it.
The tuner will automatically search for a broadcasting station, and stop when one is found, and the TUNED indicator will light up. To search for another station, press again.
- To interrupt auto tuning, press the TUNING switch.

NOTE FOR F-Z92L:
Auto tuning is not possible on the LW band.

NOTE:
When auto tuning is in use, reception may not be possible over long distances or when signals are weak. At these times manual tuning is recommended.

[Manual tuning]
Press the TUNING "–" or "+" switch and release quickly.
The tuning frequency will change by one step each time the switch is pressed. Press as many times as necessary to tune in the desired station.
The TUNED indicator will light up when the station is tuned in best.
- If you keep the TUNING switch depressed after the frequency has begun to change, the reception frequency will change continuously, and stop when the switch is released.

3. **Adjust volume with the VOLUME control ⑤ on the amplifier and the tone with the GRAPHIC EQUALIZER switches ⑬.**

MEMORIZING STATIONS (Tuner operation)

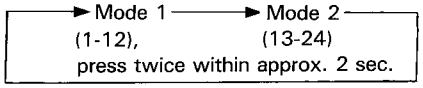
(Page 3, diagram J)

Presetting

From 1 to 24 FM/AM stations can be memorized at random. Press the STATION CALL switch once for 1 – 12 (Mode 1) and twice for 13 – 24 (Mode 2).

1. **Tune in desired station.**
   If the station is FM, then the current FM MONO ON/OFF switch setting is included.
2. **Press the MEMORY switch ⑪.**
   - The display will flash (about 5 seconds).
3. **Press the STATION CALL switch ⑦.**
   - While the display is flashing, press the switch corresponding to the station which you wish to memorize.

NOTE:
Pressing the STATION CALL switch twice within about 2 seconds switches alternately between Mode 1 and Mode 2.



When memorizing a station to Mode 1 (e.g. memorizing a station to No. 9):

By pressing the STATION CALL switch once, the station will be preset to Mode 1.

When memorizing a station to Mode 2 (e.g. memorizing a station to No. 21):

Mode 2 stations are memorized by pressing the STATION CALL switch twice within approx. 2 seconds.

- After you press the STATION CALL switch, the display will flash for approx. 2 seconds, then the station will be memorized. If you press another switch while the display is flashing, the station will not be memorized.

RECEPTION USING PRESET TUNING

(Tuner operation)

1. **Press the STATION CALL switch ⑦ into which the desired station has been memorized.**
   - To listen to a Mode 1 broadcast, press the switch once, and to listen to a Mode 2 broadcast, press it twice.
     In this way, simple and accurate reception of any desired station is possible.

NOTE:
- *The contents of the STATION CALL switches will be preserved for several days, even if the cassette tape deck amplifier power cord is unplugged.*
- *If a memorized station has been erased, memorize it again.*

Last Station Memory
- When the POWER switch is pressed to turn power on, the last station received before the power was previously turned to STANDBY mode will be received again.
- If the BAND selector switch is pressed when power is ON, the last station received before the BAND selector switch was previously pressed will be received again.

TAPE PLAY (Cassette tape deck operation)
Tapes may be played back in deck I or deck II but not in both decks at the same time.
1. **Press the EJECT switch, and load a tape which has already been recorded.**
2. **Set the DOLBY NR switch ⑲ at same position as used for recording.**
3. **Select the REVERSE MODE switch ㉕.**
4. **Press the PLAY switch (► or ◄).**
   Press the PLAY switch of the deck into which the cassette has been loaded.
5. **Adjust the volume with the VOLUME control ⑤ on the amplifier and the tone with the EQUALIZING CONTROL switches ⑬.**
6. **To stop playback, press the STOP switch (■).**

Auto Stop Mechanism
With this model, the mechanism is automatically stopped when the end of the tape is reached during the recording, playback. fast-forward, or rewind operations so that the tape will not be stretched and the pinch rollers will not be deformed.

NOTE:
- *When the PLAY switch of one deck is pressed while the other deck is in the playback mode, the deck which was playing previously will stop and playback will begin on the new deck.*

MUSIC SEARCH
You can perform music search during playback by carrying out the following operation.
1. **To listen to the program following the program on the tape now being heard, press same direction FAST switch as direction of tape playback. To listen again to the program now being heard, press opposite direction FAST switch from direction of tape playback.**
   - During a music search, the indicator corresponding to the direction in which the tape is advancing will flash.
2. **When the tape is fast forwarded or rewound and an unrecorded blank between programs is located, the tape will then be played back.**
   When doing music search, do not operate the other deck. Doing so may affect the track interval detection function.

NOTE:
When performing a music search on the following kinds of tape, the unit may misoperate. This is not a fault, however.
- *When using a tape which has non-recorded portions between tracks less than 4 seconds in length.*
- *When using a tape which has a high noise level between tracks.*
- *When using a tape which has low level or silent passages of several seconds in the same track, such as in the case of classical music.*
- *When using tape, such as a conversation tape, in which the voice is intermittent.*
- *When using a tape in which an extremely low sound level continues for at least 4 seconds in the same track.*

RECORDING ONTO A CASSETTE TAPE
(Cassette tape deck operation)
Material can be recorded on deck II only. Recording is not possible on deck I. You can make a recording of a source which has passed through the graphic equalizer.
1. **Press the DECK II EJECT switch ㉝, and load the tape for recording into deck II.**
   - Check to see that the accidental erasure prevention tab has not been broken off.
2. **Set the DOLBY NR switch ⑲ to the desired position.**
   - A tape which has been recorded using the DOLBY NR system must be played back using the same system.
3. **Select the REVERSE MODE switch ㉕.**
4. **Use the FUNCTION switch ⑦ on the amplifier to select the program source which is to be recorded and play that source.**

Program source	Selected indicator	Operation
Compact disc	CD	Playing a compact disc
Record	PHONO	Operate the turntable
Radio broadcast	TUNER	Tuning into a broadcast
Tape	TAPE	Playing a tape in deck I
Equipment which is connected to the DAT/VIDEO jacks	DAT/VIDEO	Operating equipment which is connected to the DAT/VIDEO jacks

5. **Adjust the EQUALIZING CONTROL switches ⑬ to change the sound quality and record the resulting sound.**
6. **Press the REC switch (●) ㉛.**
   - The REC indicator now lights.
   - The play indicator is now flashing.
7. **Press the PLAY switch (► or ◄) ㉞.**
8. **To stop recording, press the STOP switch (■) ㉞.**

Auto reverse function
This unit uses rotary-type recording and playback heads, and the same heads are used in both the forward and reverse directions. Tape end detection is employed to control auto reverse operation which takes place approx. 2 seconds after the tape is taken up.

NOTE:
A leader tape having a length equivalent to about 5 seconds is attached to an ordinary cassette tape. This means that for two-way travel of the leader tape there will be a break of about 12 seconds in the sound. Be very careful of this, particularly when making a two-way recording.

Pausing and restarting recording
1. **Press the PAUSE (II) switch ㉜.**
   - Recording will be suspended.
2. **To restart recording again, press the PAUSE (II) switch ㉜ or PLAY switch ㉞.**

Recording muting
When recording, this can be used to create a blank, no-signal area between songs. This blank area is needed by the music search function.

Keep the MUTE (⭘) switch ㉚ depressed during recording for the length of the blank space that you wish to create. Release to resume normal recording.

NOTE:

- *Music search operation requires unrecorded blank (mute) spaces of at least four seconds long each between songs.*
- *MUTE switch does not operate in tape copy mode.*
- *If you press the MUTE switch while recording is taking place, a non-recorded portion will be created. Be careful, therefore, not to depress the switch other when necessary.*

Questions (Q) and answers (A) on recording

Q: How is the recording level adjusted?

A: This unit has a built-in automatic level control which dispenses with the need to adjust the recording level.

Q: What is the difference between the operation of playing a tape in one deck and recording the output onto a tape in another deck (tape dubbing), and tape copying?

A: "Tape dubbing" means playing back the tape in deck I while adding "mic mixing" or graphic equalizer processing for recording on deck II. "Tape copying" means using the SYNCHRO COPY switch (NORM or HIGH) to make a duplicate tape in deck II of the tape in deck I.

	Tape that was put in DECK I (playback)	DOLBY NR switch	Resulting newly recorded tape
Tape dubbing	Tape recorded with Dolby NR	ON	Tape recorded without Dolby NR
	Tape recorded without Dolby NR	OFF	Tape recorded without Dolby NR
Tape copy	Tape recorded with Dolby NR	ON	Tape recorded with Dolby NR
	Tape recorded without Dolby NR	OFF	Tape recorded without Dolby NR

RECORD PLAY (Turntable PL-Z82)

1. **Set the FUNCTION switch ⑦ on the amplifier to PHONO.**
2. **Place the record on the platter mat.**
3. **Remove the stylus cover and release the tonearm from the arm rest.**
4. **Set the SPEED switch ⑤.**
5. **Move the ARM-ELEVATION switch ⑦ to the UP position.**
6. **Move the tonearm by hand across the record.**
   - At this stage, the platter starts to rotate.
7. **Move the ARM-ELEVATION switch ⑦ to the DOWN position.**
8. **Adjust the volume with the VOLUME control ⑤ on the amplifier and the tone with the EQUALIZING CONTROL switches ⑬.**
9. **To stop the player while a record is being played, press the STOP switch ⑧.**

RECORD PLAY (Turntable PL-Z92)

Auto play

1. **Set the FUNCTION switch ⑦ on the amplifier to PHONO.**
2. **Place the record on the platter mat.**
3. **Remove the stylus cover and release the tonearm from the arm rest.**
4. **Set the SPEED ⑤ and SIZE ⑥ switches.**
5. **Move the ARM ELEVATION switch ⑦ to the DOWN position.**
6. **Push the PLAY/STOP switch ⑧ to start record play.**
7. **Adjust the volume with the VOLUME control ⑤ on the amplifier and the tone with the EQUALIZING CONTROL switches ⑬.**

NOTE:

- *When play is completed, the tonearm will return automatically to the arm rest.*
- *When playing 45-rpm records with large center holes, place the EP adaptor onto the platter spindle.*

8. **To stop the player while a record is being played, press the PLAY/STOP switch ⑧.**

Manual play

1. **Set the FUNCTION switch ⑦ on the amplifier to PHONO.**
2. **Place the record on the platter mat.**
3. **Remove the stylus cover and release the tonearm from the arm rest.**
4. **Set the SPEED switch ⑤.**
5. **Move the ARM-ELEVATION switch ⑦ to the UP position.**
6. **Move the tonearm by hand to the desired position over the record.**
7. **Move the ARM-ELEVATION switch ⑦ to the DOWN position.**
   - The tonearm will descend onto the record and playback will start.
8. **Adjust the volume with the VOLUME control ⑤ on the amplifier and the tone with the EQUALIZING CONTROL switches ⑬.**
9. **To stop the player while a record is being played, press the PLAY/STOP switch ⑧.**

PLAYING THE COMPONENTS CONNECTED TO THE CD OR DAT/VIDEO JACKS

1. **Set the FUNCTION switch ⑦ on the amplifier to the program source which is to be played.**
   When used in combination with the Pioneer PD-Z72T or PD-Z82M CD player, the function switches to CD when play of the CD starts.
2. **Play the component to be used.**

GRAPHIC EQUALIZER CONTROLS

1. **Turn on the EQUALIZER switch ⑯.**
   - Press so that MODE display [EQ ON] indicator lights.
2. **Use EQUALIZING CONTROL switches ⑬ to adjust sound.**
   - Left and right channels are adjusted simultaneously.

How to recall a factory preset equalization curve.

This unit has two factory presets: "CAR" and "PHONES."

CAR: a curve for recording tapes to be listened to in a car.

PHONES: a curve for recording tapes to be listened to on a headphone stereo cassette player.

1. **Turn on the EQUALIZER switch ⑯.**
2. **Use the PRESET/MEMORY switch ⑰ to select PRESET.**
   - Press so that line lights under "PRESET" in MODE display.
3. **Press memory recall switch ⑮ for memory curve that you wish to recall.**

How to store an equalization curve.

After creating equalization curves, you can store them in the memory recall switches.

1. **Turn on the EQUALIZER switch ⑯.**
2. **Use EQUALIZING CONTROL switches ⑬ to adjust sound.**
3. **Press the MEMORY switch ⑭.**
4. **Press the A/CAR or B/PHONES switch to store the curve in that switch.**
   - Press while the equalizing curve display is flashing.

How to recall your memorized equalization curve.

1. **Turn on the EQUALIZER switch ⑯.**
2. **Use the PRESET/MEMORY switch ⑰ to select MEMORY.**
   - Press so that line lights under "MEMORY" in MODE display.
3. **Press switch ⑮ for memory curve that you wish to recall.**

MICROPHONE MIXING

MIXING KNOW-HOW

Mixing involves combining the signals from two input sources (a microphone and a tape, for example).

MIXING PROCEDURE

1. **Plug a microphone into the MIC jack ⑨.**
2. **Adjust volume to a suitable level.**
3. **Set the MIXING LEVEL control ⑩ to the center position between MIN and MAX.**
   - If howling occurs (a high-pitched sound from the speakers), take the following steps:
     1. Move the microphone away from the speakers.
     2. Lower the volume.
4. **Select the desired program source using the FUNCTION switches ⑦.**
5. **Start playback of the program source.**
6. **Adjust the volume with the VOLUME control ⑤.**
7. **Use the MIXING LEVEL control ⑩ to adjust the microphone level in relation to the music source.**
8. **Talk or sing into the microphone.**

NOTE:
Mic mixing is not possible when using the CD DIRECT function.

MIXING RECORDING

You can use the mixing feature to record input from a microphone and another source together.

1. **Perform steps 1 to 8 in the section "MIXING PROCEDURE."**
2. **Load a tape for recording into deck II.**
3. **Press the REC (●) switch ㉛ on deck II.**
4. **Press the PLAY (► or ◄) switch ㉞ on deck II.**
5. **Sing along with the program source.**

NOTE:
Mixed sound does not appear at the DAT/VIDEO OUT jacks.

CASSETTE TAPE RELAY PLAYBACK

- Relay playback is repeated as follows:

  Deck I forward play (►) → Deck I reverse play (◄) → Deck II reverse play (◄) ← Deck II forward play (►) ←

- Relay playback is possible for a maximum of 6 times.
- If there is a tape in only one of the decks, then it will be played continuously on both sides.

1. **Load the playback tapes into deck I and deck II.**
2. **Set the REVERSE MODE switch ㉕ to RELAY PLAY.**
3. **Set the DOLBY NR switch ⑲ at same position as used for recording.**
4. **Press the PLAY switch (► or ◄) on deck I or deck II.**
5. **To stop relay playback, press the STOP switch (■) of the operating deck.**

COPYING TAPES

Duplicating the recorded contents of one tape onto another tape is known as tape copying. The contents of the tape in deck I can be copied onto the tape in deck II (but not vice versa.) Copying is not possible while either deck is operating. You cannot record a source using the graphic equalizer.

If a tape recorded with the DOLBY NR system is copied, the copied tape will also be recorded automatically with the DOLBY NR system. If a tape recorded without the DOLBY NR system is copied, the copied tape will also be recorded automatically without the DOLBY NR system.

COPYING A TAPE WHILE LISTENING TO IT

1. **Load the pre-recorded tape into deck I and the tape for recording into deck II.**
   - Wind the tape forward past the leader to the start of the magnetic-coated portion.
   - Tape copying begins from the forward direction (►) so be careful which way around you have the tape loaded.
2. **Select the REVERSE MODE switch ㉕.**

REVERSE MODE switch	Operation
REC RELAY PLAY	One side is copied from deck I to deck II.
REC PLAY	Both sides are copied from deck I to deck II.

3. **To perform normal copying while listening to playback, set the FUNCTION switch ⑦ on the amplifier to TAPE and select the appropriate DOLBY NR switch ⑲ position.**

Even if the FUNCTION switch is set to another position, tape copying will still proceed, regardless of the switch position. The sound of the program source selected by the FUNCTION switch will be heard through the speaker.

4. **Press one of the SYNCHRO COPY switches ㉙.**
   NORM: for tape copying at normal speed.
   HIGH: for tape copying at about twice normal speed.
   - Deck I plays back while deck II records.
   - When the tape comes to the end due to the reverse mode setting, it will automatically stop.
5. **Press the STOP switch (■) on either deck to stop the copying at any time.**

NOTE:

- *If you are using a TV in the vicinity of the unit, noise will be recorded. Either switch off the TV or move it away from the unit.*
- *There is variation in actual tape length even among cassettes of the same length label (C-60, C-90, etc.). Therefore, even if the recording tape is labeled as the same length as the playback tape, it is possible for the recording tape to end first without recording all of the contents of the playback tape.*

TAPE FADER

(function for fading out recorded tapes)

With this function, it is possible to change any portion of a recorded tape into a fade-out. Sound fades to no-signal recording after about two to three seconds and the tape stops after about 10 seconds.
When the tape is played back, the sound will gradually start decreasing from the beginning of the faded portion, and be cut off completely in approximately 10 seconds.

1. **Load the recorded tape into deck II.**
   Tape fader can not be used on Deck I.
2. **Operate deck II to set the tape to the beginning of the portion to be faded out.**
3. **Press the FADER switch ⑳.**
   - The FADER indicator and recording indicator light; DECK II direction (◄ and ►) indicator flashes.
4. **Press the PLAY switch (► or ◄) ㉞.**
   - The fade-out operation will start, then stop after approximately 10 seconds.

NOTE:
- *If unwanted sound remains after the fade-out, use the MUTE switch (●) to erase it.*
- *Make sure that the accidental erasure prevention tab on the cassette (for the side in use) is not broken off.*

A.S.E.S.
(Auto Synchro Editing System)

(This function can be used with the Pioneer PD-Z72T or PD-Z82M CD player when the CONTROL terminal of the CD player is connected to that of the tuner.)

- CD playback sound is recorded automatically on the tape and fade-out occurs automatically at the tape end.
- Recording starts from the forward (►) direction.
- During both-side recording, when the tape ends in the middle of a song in the forward (►) direction, it will restart from the beginning of the song when recording continues in the reverse (◄) direction.

1. **Put discs in the CD player.**
2. **Put a tape to be recorded in Deck II.**
3. **Set the DOLBY NR switch ⑲ to the desired position.**
4. **Set the REVERSE MODE switch ㉕ to the desired position.**
5. **Press the ASES switch ㉔.**

• When Reverse Mode Switch is at " REC RELAY PLAY "

1. The cassette tape for recording is rewound to the beginning.
2. Recording of the cassette tape begins in the forward direction.
3. Playback begins on the CD player.
4. When one side is recorded, the CD player is set to the pause mode, the cassette tape is rewound for approximately 3 seconds, and a fade-out is recorded.

• When Reverse Mode Switch is at " REC PLAY "

The following operations are performed after steps 1 through 4 above:

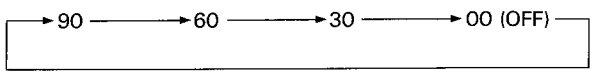
5. Recording of the cassette tape begins in the reverse direction.
6. Playback of the CD will resume from the beginning of the track at which it was paused.
   If the CD is longer than the tape, the tape will be rewound for approximately 3 seconds and the fade-out operation will start, in the same way as for side A.

6. **During A.S.E.S. operation, it can be stopped by pressing the DECK II STOP switch (■) ㉞.**

NOTE:
- *Fade-out recording may not occur with some tape types under some conditions.*
- *A.S.E.S. performs automatic recording from CD to tape and performs automatic fade-out at the tape end, so do not attempt to perform manual operations during A.S.E.S. operation.*
- *A.S.E.S. may stop or operate incorrectly when there is a song change near the end of the tape. In such cases use manual operation to record the remaining songs.*

SLEEP TIMER — Automatically turns off power.

Use the supplied remote control unit to operate. Power turns off automatically after your set time has elapsed.
Each time you press the SLEEP key, the setting changes in the sequence shown here.



When the WAKE UP timer is on, the sound fades out when the SLEEP TIMER cuts the power. However, when the WAKE UP timer is off, or when WAKE UP 1 or WAKE UP 2 are on and the volume setting is ✻, then there is no fade out.

TIMER PLAYBACK

(Use tuner for timer setting.)

A compact disc, cassette, or the radio broadcast can be used as an alarm clock.

At the preset time, volume rises gradually as playback begins. (The volume knob does not move if you select ✻).

Timer playback will begin every day at the same time as long as the timer playback mode is not turned off.

Tape playback

- Timer playback is possible with a cassette tape loaded in deck I.

Compact disc playback (When PD-Z72T or PD-Z82M is used together.)

- The disc will be played from the beginning when the timer turns the power on.

[Timer setting example] (See page 3, diagram K)

Using WAKE UP 1 to play a CD from 7:15 to 8:15.

(Use the same procedure when using WAKE UP 2.)

1. **Press the SET switch ③ and then (within 5 seconds) press WAKE UP 1 switch ②.**
2. **Use the "–" (DOWN) and "+" (UP) switches ⑨ to set the hour to turn on. ("7" is used in example.)**
3. **Press the SET switch.**
4. **Use the "–" (DOWN) and "+" (UP) switches to set the minute to turn on. ("15" is used in example.)**
5. **Press the SET switch.**
6. **Use the "–" (DOWN) and "+" (UP) switches to set the hour to turn off. ("8" is used in example.)**
7. **Press the SET switch.**
8. **Use the "–" (DOWN) and "+" (UP) switches to set the minute to turn off. ("15" is used in example.)**
9. **Press the SET switch.**
10. **Use the "–" (DOWN) and "+" (UP) switches to select the FUNCTION (listening source). ("CD" is used in example.)**

    The function changes each time the "–" and "+" switches are pressed. The function changes in the following order when the "+" switch is pressed:

    CD → PHONO → TUNER → TAPE → DAT/V

    Select CD, TAPE, or TUNER.

    - **If you select CD:**

    Put disc in the CD player.

    - **If you select TAPE:**

    Put a recorded tape in deck I and wind the tape to the point from which you wish playback to begin.

    NOTE:

    Timer playback is not possible with the tape in deck II.

    - **If you select TUNER:**

    Select the station call number. Station call is not possible for stations not memorized in the STATION CALL switches.

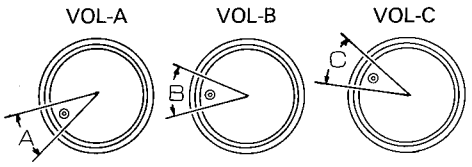
    ① Press the SET switch.

    ② Use the "–" (DOWN) and "+" (UP) switches to select the desired station call number.

11. **Press the SET switch.**
12. **Use the "–" (DOWN) and "+" (UP) switches to set the desired volume level. ("VOL-B" is used in example.)**

    You can select from among four volume level settings. Each time you press the "+" switch, the volume level setting changes in the sequence shown here.

    A → B → C → ✻



VOL-✻ — Present volume control setting.

13. **Press the SET switch.**

    After showing the following sequence of information, the display returns to normal: ON time, OFF time, FUNCTION (and station call number in case of tuner), volume.

[To activate the timer]

14. **Press the WAKE UP 1 switch (same switch as in step 1).**

    The WAKE UP timer indication should light.

15. **If power is on, turn it off.**

    Play will begin automatically at the selected time even if you do not turn off the power. However, the volume setting will not change.

To check timer settings

Press the CHECK switch ④ and then (within 5 seconds) press the timer switch that you wish to check.

[Example]

To check WAKE UP 1, press CHECK then WAKE UP 1.

- The display will sequentially show the WAKE UP 1 settings.

To change timer settings

- To change all of the timer settings, start over again, inputting the settings that you want.
- To change only one of the timer settings (after pressing the SET and WAKE UP (1 or 2) switches), press the SET switch repeatedly until the display shows the item that you wish to change. Then use the "–" and "+" switches to adjust the setting. Finally, repeatedly press the SET switch to advance to the end of the procedure.

If you make a mistake while setting the timer

Go ahead to the next item and continue setting the various items until you finish. Then use the "To change timer settings" procedure to change the value of the item that was incorrect.

Turning timer on and off

After inputting the timer settings, check the tuner display to confirm which timer is on. The one that is lit (WAKE UP [1] or [2]) is the one that will be executed.

If you press a WAKE UP switch (1 or 2) to turn off the indication, then the timer will not operate. However, since the settings remain stored in memory, you can press the switch again to reactivate the timer.

About the SNOOZE function

After timer playback begins, you can press the SNOOZE key of the remote control unit to turn the power off one time; it comes back on after approx. 5 minutes.

NOTE:

Power will stay off and play will not resume after 5 minutes if the SNOOZE key is pressed when there is less than 5 minutes time remaining in the timer setting.

TIMER RECORDING

(Use tuner for timer setting.)

This allows unattended recording of radio broadcasts and recording from a CD while asleep.
Recording the playback of deck I on deck II is possible.
CD timer recording uses A.S.E.S. operation.
The timer mode is released after timer recording has been performed once.

NOTE:

- *Check to see that the cassette accidental erasure prevention tabs have not been removed.*
- *To prevent loud music reproduction while you are away, set the volume to zero for timer recording, and select VOL-* as the timer volume setting.*

[Timer setting example] (See page 4, diagram L.)

1. **Insert the tape to be recorded in Deck II.**
   Timer recording begins in the forward direction (►) so be careful which way you put in the tape.
2. **Set the DOLBY NR switch ⑲ on the cassette tape deck to the position of your choice.**
3. **Set the REVERSE MODE switch ㉕ on the cassette tape deck.**
   - To record on both sides of the tape with the 'REC PLAY' position, be sure to load the tape with the forward side facing forward. The tape will stop automatically when the end of the reverse side is reached.
4. **Press the SET switch ③ and then (within 5 seconds) press the timer REC switch ②.**

The rest of the procedure is the same as steps 2 through 13 of the "TIMER PLAYBACK" procedure on page 22. Set the FUNCTION to TUNER, CD or TAPE.
If you select CD, then be sure to load a compact disc.
If selecting TAPE, put a tape to be played back in deck I, put a tape to be recorded in deck II, and set the DOLBY NR switch and REVERSE MODE switch.

[Activating the timer for recording]

14. **Press the timer REC switch ②.**
    The REC timer indication should light.
15. **If power is on, turn it off.**
    Recording will begin automatically at the selected time even if you do not turn off the power.

To check timer settings

Press the CHECK switch and then (within 5 seconds) press the timer REC switch. The display will show sequentially the timer settings.

To change timer settings

Same as timer playback procedure — see page 22.

If you make a mistake while setting the timer

Same as timer playback procedure — see page 22.

Turning timer on and off

Confirm that [REC] is lit on the tuner display.
Timer recording ends after being performed once. However, since the settings remain stored in memory, you can reactivate the timer by pressing the REC switch so that REC is lit again.

About timer setting priority:

ON time: REC timer takes top priority. If WAKE-UP 1 and WAKE UP-2 are both at the same ON times, then WAKE-UP 1 has priority.

OFF time: REC timer takes top priority. Later time takes priority between WAKE-UP 1 and WAKE-UP 2. SLEEP TIMER takes priority over WAKE-UP timer.

MAINTENANCE

CLEANING THE HEAD SECTION

The heads, capstan and pinch roller are parts which are liable to get dirty quite easily. In particular, if the heads are dirty, the high frequency components of the sound will not be reproduced and the stereo balance will be impaired, resulting in a deterioration in sound quality. It is therefore recommended that the head section be cleaned regularly.

- Press the EJECT switch to open the cassette door.
- Dip a cleaning swab into head cleaning fluid and use it to wipe the heads, capstan, and pinch roller. Wait 2—3 minutes till cleaning fluid dries.

See diagram M on page 4.

① Head ② Capstan ③ Pinch roller

NOTE:

- *This unit uses a head-slant standby system, with the result that the heads are mounted at an angled position.*

DEMAGNETIZING THE HEAD

The recording/playback head becomes magnetized when you use the tape deck for prolonged periods of time. This results in noise being generated and the treble dropping off during recording and playback. The recording/playback head should therefore be demagnetized regularly with a commonly sold head demagnetizer.
For further details, refer to the operating instructions accompanying your head demagnetizer.

NOTE:

- *Do not hold a screwdriver, metal objects or magnets close to the heads.*
- *When demagnetizing the heads, be sure the unit POWER switch is in the STANDBY position.*

CLEANING THE UNIT

Wipe the front panel and the cassette door when dusty or greasy with a soft cloth containing a small amount of ordinary clean-up liquid. Then wipe dry with a cloth. Never use volatile spirits like thinners, benzine or alcohol, as they will damage the panel finish.

REPLACING THE STYLUS

1. **Remove the stylus gently. (See diagram N on page 4.)**
2. **Attach the new stylus to the cartridge.**

① Cartridge ② Stylus

NOTE:

- *The service life of the stylus on the supplied cartridge ranges from 800 to 1,000 hours.*
- *Using a worn or damaged stylus can damage your records and distort the sound reproduction. Remember to replace the stylus at the earliest possible date.*
- *Always use the PIONEER "PN-210" as a replacement stylus.*
- *Always ask for a genuine PIONEER replacement stylus.*

PRECAUTION:

If the turntable is mounted directly on or against a speaker, the vibration from the speaker will be transported to the tonearm's cartridge, thus causing feedback howling. Be sure that speakers are mounted sufficiently isolated from the turntable.

ADJUSTING THE STYLUS DESCENT POSITION (PL-Z92 only)

Proceed as follows when the stylus does not descend at the proper position on the record during auto play. While performing the adjustment, take care not to scratch the record with the stylus.

1. **Place a 30-cm record on the platter.**
2. **Push the PLAY/STOP switch to start auto play.**
   - Check the direction and amount of stylus deviation (how many millimeters towards the inside or outside of the record lead-in-groove).
3. **Push the PLAY/STOP switch to return the tonearm to the arm rest.**
4. **Set the ARM ELEVATION switch to the UP position and manually move the tonearm across the outside edge of the record.**
5. **Rotate the screw with a small screwdriver in accordance with the direction of the deviation observed in step 2. (See diagram O on page 4.)**

   ① Adjustment hole
   ② Small screwdriver
   - Rotate the screw clockwise if the stylus descends on the outside of the proper position.
   - Rotate the screw counterclockwise if the stylus descends on the inside of the proper position.
6. **Manually return the tonearm to the arm rest and set the ARM ELEVATION switch to the DOWN position.**
7. **Push the PLAY/STOP switch and check that the stylus stops at the lead-in groove on the outer circumference of the record. If the position is still not correct, repeat steps 2 to 6.**

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used.
If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Cassette tape deck amplifier

Symptom	Probable Cause	Remedy
Power switch is on but power does not turn on.	• AC cord is unplugged.	• Plug power cord into AC outlet.
No sound from speakers.	• Volume is turned all the way down. • Speaker cord is disconnected. • Speaker cord is connected with vinyl insulation still on. • Function is not set to your desired listening source. • Connection cords are not connected or are broken.	• Raise volume knob setting. • Connect speaker cords correctly. • Strip vinyl insulation from speaker wire tips before connecting. • Select to correct function. • Connect correctly or replace with good-quality cords.
Sound from only one speaker.	• One of the speaker cords is disconnected or broken.	• Connect correctly or replace with good-quality cord.
Screeching or howling sound heard during mic mixing.	• Microphone angle is bad. • Microphone is too close to speaker. • Volume is too loud.	• Change microphone angle. • Put microphone further from speakers. • Reduce volume.
Tape does not move.	• Deck is in pause mode. • Cassette inserted incorrectly.	• Press pause or play button. • Put cassette properly in holder.
No sound heard from tape.	• Function not set to TAPE. • Playing unrecorded tape.	• Set Function to TAPE. • Put in recorded tape.
Tape sounds unclear, not loud enough.	• Heads are dirty.	• Clean tape heads.
Can not record.	• Erasure prevention tabs are broken off. • Heads are dirty. • Tape to be recorded is in deck I.	• Put tape over tab holes. • Clean tape heads. • Put tape in deck II (deck I cannot record).
Can not copy tape.	• Both deck I and II do not have tapes loaded. • Tape in deck II has erasure prevention tabs broken off.	• Put correct tapes in correct decks. • Use cassette that can be recorded on.
Treble tones unclear.	• Dirty heads. • DOLBY NR system is ON when listening to a tape recorded without Dolby NR.	• Clean heads. • Use same noise reduction system for playback as for recording. (Do not play tapes recorded with different NR systems.)
Treble tones too strong.	• Tape recorded with DOLBY NR but played without.	• Play in same condition as recording. (Turn on DOLBY NR switch for recorded tapes with Dolby NR.)
Strange sounds heard (or recorded from) tape, CD, or radio.	• TV is on. • This unit is too close to TV.	• Turn off TV. • Move away from TV until interference stops. • Copy using NORM instead of HIGH speed.
Music Search does not work.	• Not space of 4 seconds between songs.	• Use tape that has 4-second spaces between songs.

TROUBLESHOOTING

Tuner

No reception.	• Antenna not connected. • Wrong radio band. • Station not tuned in. • Function not set to TUNER.	• Connect antenna correctly. • Set to desired radio band. • Tune in station. • Set Function to TUNER.
Beat noise heard.	• TV is on. • Loop antenna is at bad position.	• Turn off TV or move away. • Set loop antenna to better position.
Noise heard.	• Interference from nearby fluorescent light, dryer, or other electrical appliance. • Not tuned in correctly.	• Stop using device causing interference. • Use tuner controls to tune in station.
No FM reception.	• Antenna not connected. • Wrong radio band.	• Connect antenna correctly. • Set to desired radio band.
Sound is distorted.	• Antenna in poor position. • Broadcast is weak. • Interference from other electrical devices or multipath reception.	• Change antenna to position that does not cause distortion. • Use external antenna. • Change supplied antenna position.

Remote Control Unit

Remote control does not work.	• Batteries dead or no batteries in remote control unit. • Poor angle or too great a distance from the remote sensor window. • There is an obstacle between you and the remote sensor window. • For CD player, the remote control cord is not connected. • A fluorescent light is shining on the remote sensor window.	• Insert batteries or change to new batteries. • Use within seven meters and within a 30 degree angle left or right of the remote sensor window. • Change your position or move the obstacle. • Correctly connect remote control cord. • Move so fluorescent light does not shine directly on tuner front panel remote sensor window.

Clock and Timer

No time indication.	• There was a power blackout. • AC plug was pulled.	• Set time again. • Set time again.
Timer does not work.	• Current time is not set. • Start and/or stop time is not set. • Timer is not on.	• Set correct present time. • Set ON and OFF times. • To use timer, press the timer selector switch so that the timer display lights.

Turntable

Platter does not turn.	• Belt is off.	• Put belt correctly on platter.
No sound.	• Function not set to PHONO.	• Set Function to PHONO.
Noise or scratchy sounds.	• Dust on record. • Scratch on record.	• Clean record. • Use good record.
Tonearm stylus does not start playing at correct position. (PL-Z92 only)	• Tonearm lead-in position needs adjustment. • Record size is not standard.	• Refer to page 24. Adjust position. • Use different record or MANUAL PLAY.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

SPECIFICATIONS

Cassette tape deck amplifier: DC-Z82
AMPLIFIER SECTION
Continuous Average Power Output is 35 Watts* per channel, min., at 8 ohms from 40 Hertz to 20.000 Hertz, with no more than 0.3% total harmonic distortion.

**Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers.*

Music power ..... 65 W + 65 W (1 kHz, T.H.D. 1%, 8 ohms)
Music power (DIN)..... 65 W + 65 W (1 kHz, T.H.D. 1%, 8 ohms)
Peak music power ..... 350 W (8 ohms)
Continuous Power Output (DIN) ..... 40 W + 40 W (1 kHz, T.H.D. 1%, 8 ohms)
Graphic equalizer frequency band..... 60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz, ±7 dB
Signal-to-noise ratio (IHF, short-circuited, A network)
PHONO ..... 72 dB
Signal-to-noise ratio (DIN, continuous Power/50 mW)
PHONO ..... 68 dB/60 dB
Total Harmonic Distortion
(40 Hz to 20,000 Hz, 20 W, 8 ohms)**..... No more than 0.2%

Tape Deck Section
Systems..... 4 track, 2-channel stereo
Heads..... Recording/playback head x 1
Playback head x 1
Erasing head x 1
Motor..... DC servo 2 speed motor x 1
Wow and Flutter..... No more than 0.09% (WRMS)
Fast Winding Time ..... Approximately 95 seconds (C-60 tape)
Frequency Response (−20 dB recording):
Normal tape ..... 35 Hz to 14,000 Hz ±6 dB
CrO_2 ..... 35 Hz to 15,000 Hz ±6 dB
Metal tape ..... 35 Hz to 16,000 Hz ±6 dB
Signal-to-noise ratio
Dolby NR OFF..... 56 dB
Noise Reduction Effect
Dolby B type NR ON ..... More than 10 dB (at 5 kHz)

Furnished Parts
Operating Instructions 1
Remote control unit 1
Dry cell batteries 2

Miscellaneous
Power requirements
U.K. and Australian models..... a.c. 240 Volts ~, 50/60 Hz
Other destination models
..... AC 110/120 - 127/220/240 V (switchable) 50/60 Hz
Power Consumption ..... 288 W
Dimensions ..... 360 (W) x 287 (H) x 334 (D) mm
14-3/16 (W) x 11-5/16 (H) x 13-2/16 (D) in
Weight (without package)..... 8.4 kg (18 lb 8 oz)

FM/AM tuner: F-Z92 (L)

FM Tuner Section
Frequency range..... 87.5 MHz to 108 MHz
Usable Sensitivity..... Mono: 12.5 dBf, IHF (1.2 μV/75 ohms)
Sensitivity (DIN)..... Mono S/N 26 dB: 0.9 μV/75 ohms
Stereo S/N 46 dB: 50 μV/75 ohms
Signal-to-Noise Ratio (IHF, 85 dBf Input) ..... Mono: 77 dB
Signal-to-Noise Ratio (DIN)..... Mono: 66 dB
Stereo: 60 dB
Distortion ..... Stereo: 0.5% (1kHz)
Antenna Input ..... 75 ohm unbalanced

MW (AM) Tuner Section
Frequency range
When 10 kHz step ..... 530 kHz to 1,700 kHz
When 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity (IHF, Loop antenna) ..... 350 μV/m
Antenna..... Loop Antenna
Output Level (AM 30% MOD) ..... 150 mV

LW Tuner Section
(For LW-equipped models only)
Frequency range ..... 153 kHz to 281 kHz
Sensitivity (IHF, Loop antenna) ..... 1500 μV/m
Antenna..... Loop Antenna
Output Level (AM 30% MOD) ..... 150 mV

Miscellaneous
Dimensions ..... 360 (W) x 63 (H) x 315 (D) mm
14-3/16 (W) x 2-1/2 (H) x 12-3/8 (D) in
Weight (without package) ..... 2.2 kg (4 lb. 14 oz)

Furnished Parts
FM T-type Antenna..... 1
AM Loop Antenna 1

Turntable: PL-Z92/PL-Z82

Motor, Platter
Motor Type..... DC servo motor
Drive Method ..... belt drive
Speed ..... 33-1/3, 45 RPM
Speed Variation ..... 0.07% WRMS (JIS)
±0.10% WTD Peak (DIN)
Signal-to-Noise Ratio ..... 63 dB (DIN-B)
Platter..... 295 mm dia., aluminum die-cast

Tonearm
Type..... Dynamic balance type, straight tonearm

Installed Cartridge
Type ..... MM Type
Stylus..... 0.6 mil diamond
Replacement Stylus PN-210
Output voltage..... 2.5 mV (1 kHz, 5 cm/s, Lat. peak)
Tracking Force..... 2.0 - 3.0 g (optimum 2.5 g)
Frequency Response ..... 20 Hz to 25,000 Hz
Load Resistance ..... 47 kΩ
Cartridge Weight..... 4 g

Other
Dimensions ..... 360 (W) x 90 (H) x 359.5 (D) mm
14-3/16 (W) x 3-9/16 (H) x 14-1/8 (D) in
Weight
PL-Z92 ..... 2.7 kg (5 lb 15 oz)
PL-Z82 ..... 2.7 kg (5 lb 15 oz)

Accessories
EP Adaptor..... 1

- *Specifications and design subject to possible modification without notice due to improvement.*

***Measured By Audio Spectrum Analyzer.*

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